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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,639	03/09/2001	Byung Hyo Kim	P-195	3935

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EXAMINER

SIDDIQI, MOHAMMAD A

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 03/04/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

①

Office Action Summary

Application No.

09/801,639

Applicant(s)

KIM, BYUNG HYO

Examiner

Mohammad A Siddiqi

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/23/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-10 are presented for examination. Claims 1-10 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Vanhoof et al. (6212566) (hereinafter Vanhoof).
4. As per claim 1, Vanhoof discloses an inter-processor communication apparatus (see abstract) of a mobile communication system (col 2, lines 20-22) comprising:

a data-FIFO configured to store a receiving data (col 25, lines 43-46 and col 48, lines 7-11);

a slave-logic configured to control a writing operation (figure 6, element 522b, 522c) of the data-FIFO (col 25, lines 43-46) and counting the length of the receiving data until an end-tag signal is inputted (col 20, lines 28-39);

a length-FIFO (col 25, lines 43-46) configured to store the data length counted by the slave-logic (col 20, lines 28-39); and

a CPU (figure 1, element 202, 204) configured to continuously read the data stored in the data-FIFO (col 35, lines 1-6) as much as the data read from the length-FIFO when an interrupt signal (col 57, lines 10-15) is inputted from the slave-logic (figure 6, element 522b, 522c, 532b, 532c, 532d, col 20, lines 28-39).

5. As per claim 2, Vanhoof discloses slave-logic (figure 6, element 522b, 522c, 532b, 532c, 532d, col 20, lines 28-39) counts the length of the receiving data until an end tag signal is inputted (col 48, lines 3-15).

6. As per claim 3, Vanhoof discloses the read data length is one frame data length (col 26, lines 33-36).

7. As per claim 4, Vanhoof discloses the slave-logic (figure 6, element 522b, 522c, 532b, 532c, 532d, col 20, lines 28-39) stores the counted data length in the length-FIFO when the end tag signal is inputted and outputs an interrupt signal to the CPU (col 35, lines 12-32).

8. As per claim 5, Vanhoof discloses the CPU continuously reads the data stored in the data-FIFO (col 57, lines 10-60) by 1 byte unit as much as the data length stored in the length-FIFO (col 35, lines 12-14).

9. As per claims 6, Vanhoof discloses an inter-processor communication (see abstract) method of a mobile communication system (col 2, lines 20-22), comprising the steps of:

Storing a receiving data in a first region (col 48, lines 8-11); counting the length of the receiving data stored in the first region (figure 12, col 35, lines 12-37);

checking whether an end tag is received (col 48, lines 13-15); storing the counted data length in a second region when the end tag is received and outputting an interrupt signal to a CPU (figure 12, col 35, lines 12-37 and col 48, lines 8-15); and

continuously reading the data stored in the first region by the CPU as much as the data length stored in the second region (figure 12,col 35, lines 12-37).

10. As per claim 7, Vanhoof discloses the first and the second regions are FIFO (figure 11, col 35, lines 1-3).

11. As per claim 8, Vanhoof discloses the data length stored in the second region is one frame of data length (col 26, lines 33-36).

12. As per claim 9, Vanhoof discloses the CPU (figure 1, element 202, 204) continuously reads the data by 1 byte unit (col 35, lines 11-14).

13. As per claim 10, Vanhoof discloses an inter-processor communication (see abstract) apparatus of a mobile communication system (col 2, lines 20-22), comprising:

Means for Storing a received data (col 26, lines 28-37) in a first region (col 48, lines 8-11);

means for counting the length (col 26, lines 28-37) of the received data stored (col 26, lines 28-37) in the first region (figure 12,col 35, lines 12-37);

Means for checking (fig 12) whether an end tag is received (col 48, lines 13-15);

Means for storing the counted data (col 26, lines 28-37) length in a second region when the end tag is received and outputting an interrupt signal to a CPU (figure 12, col 35, lines 12-37 and col 48, lines 8 -15); and

Means for reading the data stored (figure 12,col 35, lines 12-37) in the first region by the CPU as much as the data length stored (col 26, lines 28-37) in the second region (figure 12,col 35, lines 12-37).

Response to Amendment

14. Applicant's arguments filed 01/23/04 have been fully considered but they are not persuasive:

In response to applicant's argument " Vanhoof et al. fails to disclose at least features of a slave logic", the examiner respectfully disagrees. The Vanhoof prior art teaches slave transmitter (logic) channels, each channel has summing module and the data is summed in that module (fig 6, col 20, lines 25 -32). Summing data produced the length of recited received and transmitted data. Vanhoof also teaches the use of FIFO buffer for transmitting data (col 25, lines 43-46). Vanhoof teaches the commands to stop and start transmission of

data (col 25, lines 25-30), continuously read (col 48, lines 7-10).

Therefore, limitations are met by the reference.

In response to applicant's argument "Vanhoof et al. fails to disclose a CPU configured to continuously read", the examiner respectfully disagrees. The Vanhoof prior art teaches processor (Fig 1, element 204, 202, col 34, lines 60-67 and col 35, lines 1-25), maintaining FIFO of 67 bytes (length) teaches counting. Therefore, claims 1-5 stand rejected.

In response to applicant's argument "Vanhoof et al. fails to teach or suggest storing received data", the examiner respectfully disagrees. The Vanhoof prior art teaches storing the receive data, checking the length (col 26, lines 28-37), byte stuffing used for end of data (col 25, lines 25-30, and col 26, lines 38-46), and two region (fig 11, col 34, lines 60-67 and col 35, lines 1-32). Therefore, limitations are met by the reference. Claims 6-9 stand rejected.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A Siddiqi whose telephone number is (703) 305-0353. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAS



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